



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/817,251	03/27/2001	Hisao Hiramatsu	Q63803	8044

7590 07/20/2004

SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC  
2100 Pennsylvania Avenue, N.W.  
Washington, DC 20037

EXAMINER
----------

SOOHOO, TONY GLEN

ART UNIT	PAPER NUMBER
----------	--------------

1723

DATE MAILED: 07/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/817,251

Applicant(s)

HIRAMATSU ET AL.

Examiner

Tony G Soohoo

Art Unit

1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 11-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 11-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, are rejected under 35 U.S.C. 103(a) as being unpatentable over Cloud Jr, 1031562 in view of Chestney 4077629 (both cited previously in paper no.6).

Cloud Jr, teaches a method in a water gun whereby liquid is manipulated by sucking in a nozzle 11 a fluid and then discharging the fluid from the same nozzle 11.

Cloud Jr discloses all of the recited subject matter as defined within the scope of the claims with the exception of directly discharging the liquid at a different horizontal position in which the the position in which the liquid is sucked.

The Chestney reference teaches a method of manipulating liquid whereby one uses a water gun intake nozzle to suck up liquid from a pool (container) and then the discharge nozzle is position to a different orientation to attempt to shoot an object in the same pool (same container). It is noted that whereby this is a game, a player will inherently miss the object and liquid from the water gun will be discharged directly onto the surface of the main liquid of the pool and thereby directly causes an mixing interaction with the discharged liquid with the pool.

In view of the teaching by Chestney that a game inside a pool may be played with a water gun, it is deemed that it would have been obvious to one of ordinary skill in

Art Unit: 1723

the art to provide for the additional steps of the use of the Cloud Jr. water gun whereby it is used inside a pool container whereby the suction and discharge of the liquid is taken from the same pool water (liquid) and further provide a step of attempting to spray the discharged water away from the user and the point of liquid suction so as to spray an object, and whereby as it is a game and one may miss the object, the step of missing the object and spraying directly onto the pool water surface may be provided which thereby provides the subsequent effect of mixing the liquid in the pool.

With regards to claims 2-5, it is noted that air may be interently sucked up by the gun and that one may play the game a number of times thereby providing plural times of sucking and discharging the fluid from the nozzle.

2. Claims 1-5, 7, are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 62184357 (JP '357 cited on PTO 1449) in view of Qureshi et al 5383372 (newly cited).

JP '357 teaches a method of mixing including

**PURPOSE:** To easily and quickly stir liquid with an automatic clinical specimen inspecting apparatus, etc., by alternately repeating a process for lowering a pipette to hold the top end thereof under the liquid surface and sucking the liquid and process for rising the pipette to hold the top end above the liquid surface and discharging the liquid.

**CONSTITUTION:** The liquid A is put into the bottom of a vessel 4 and in this state the pipette sucking the liquid B is inserted into the vessel 4 and discharges the liquid B therein. The liquid A and the liquid B are mixed but are not yet thoroughly stirred. The top end of the pipette 1 is then lowered and is immersed under the liquid surface of the mixed liquid A+B to suck the specified amt. thereof, then the pipette 1 is raised while the mixed liquid is held sucked into the top end thereof and the liquid in the pipette 1 is discharged above the liquid surface of the mixed liquid existing in the vessel

Art Unit: 1723

4. The liquids in the vessel 4 are thus physically stirred by repeating the lowering-suction and rising- discharge of the pipette 1 with the liquid surface in the vessel as a boundary. (COPYRIGHT: (C)1987,JPO&Japio)

The JP '357 reference discloses all of the recited subject matter as defined within the scope of the claims with the exception of moving the pipette to a different horizontal position (translate) of the nozzle so that when the fluid is discharged, discharged fluid is discharged directly into the liquid in the container at a discharging position horizontally different from the sucking position. It is also noted however that the JP '357 teaching does not require the nozzle to be in the same horizontal position to perform the method.

The reference to Oureshi et al teaches that a pipette may be hand held for the suction and dispensing of a liquid (and also discharged with air blown out if desired) for more precise measurement and delivery of liquids.

In view of the teaching of Oureshi that one may use a hand held pipette to suck and dispense liquids, it is deemed that it would have been obvious to one of ordinary skill in the art to modify the step of JP '357 with a use of a handheld pipette so that mechanical equipment costs are minimized when using the mixing method of JP'357. Additionally, it is noted that when a hand held device is used, the process of mixing as taught by the JP '357 would have inherent variations in the horizontal and vertical positioning of the hand held pipette nozzle by the user when performing the suction and discharge, since the human hand may not readily replicate an exact positioning of a machine.

Art Unit: 1723

With regards to claim 7 , it is deemed that it would have been obvious to one of ordinary skill in the art to substitute for the liquid material in the method and in particular manipulate blood as the liquid to be stirred whereby, it is old and well known of the desire to mix blood in certain instances in the medical field. It has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

3. Claims 6, 11-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 62184357 (JP '357 cited on PTO 1449) in view of Qureshi et al 5383372 (newly cited) as applied to claim 1 above, and further in view of Makino et al 5555767 (previously cited).

JP 62184357 (JP '357 cited on PTO 1449) in view of Qureshi et al 5383372 (newly cited) discloses all of the recited subject matter as defined within the scope of the claims with the exception of discharging the liquid toward an inclined wall of container.

The Makino (et al) reference discloses that a mixing method of blood may be used with a container having straight sides as seen in figures 1-2 or with a container having inclined sides 3-5. Additionally, the Makino reference teaches that one may place a nozzle in a position near and directed toward the incline when dispensing the fluid into the container as seen in figure 3B, 3D, 4B, 4D, column 10, lines 53-61, 66

Art Unit: 1723

through column 11, line 3, and further teaches that a container with an inclined wall provides good string and mixing performance, column 11, lines 24-32.

In view of the teaching of Makino, it is deemed that it would have been obvious to one of ordinary skill in the art to provide for the method of JP '357 as modified by Oureshi et al with the use of a container with an inclined wall and further dispense the fluid toward the incline so as to produce good stirring and mixing performance with the discharge of the fluid into the main liquid sample.

With regards to claim 17, it is deemed that it would have been obvious to one of ordinary skill in the art to substitute for the liquid material in the method and in particular manipulate blood as the liquid to be stirred whereby, it is old and well known of the desire to mix blood in certain instances in the medical field. It has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

### ***Double Patenting***

4. Applicant is advised that should claim 6 be found allowable, claims 11 and 16 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

**Conclusion**


**5. No patentable subject matter has been indicated.**

**6. ALL claims are rejected.**

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tony G Soohoo whose telephone number is (571) 272 1147. The examiner can normally be reached on 7:00 AM - 5:00 PM, Tues. - Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on 571-272-1151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Tony G Soohoo  
Primary Examiner  
Art Unit 1723

\*\*\*